



Unit 3

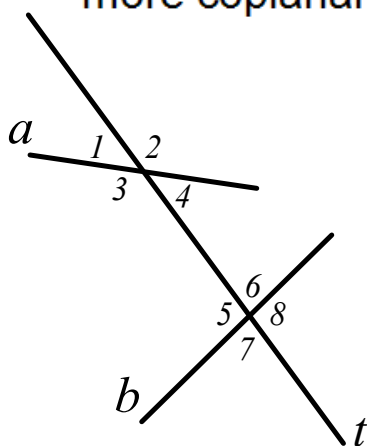
Parallel and Perpendicular Lines

I. Parallel lines:

A. Parallel lines: coplanar lines that never intersect.

B. Skew lines: non-coplanar lines that never intersect.

C. Transversal: a line that intersects two or more coplanar lines.

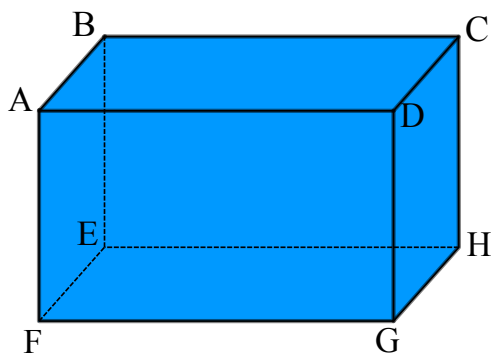


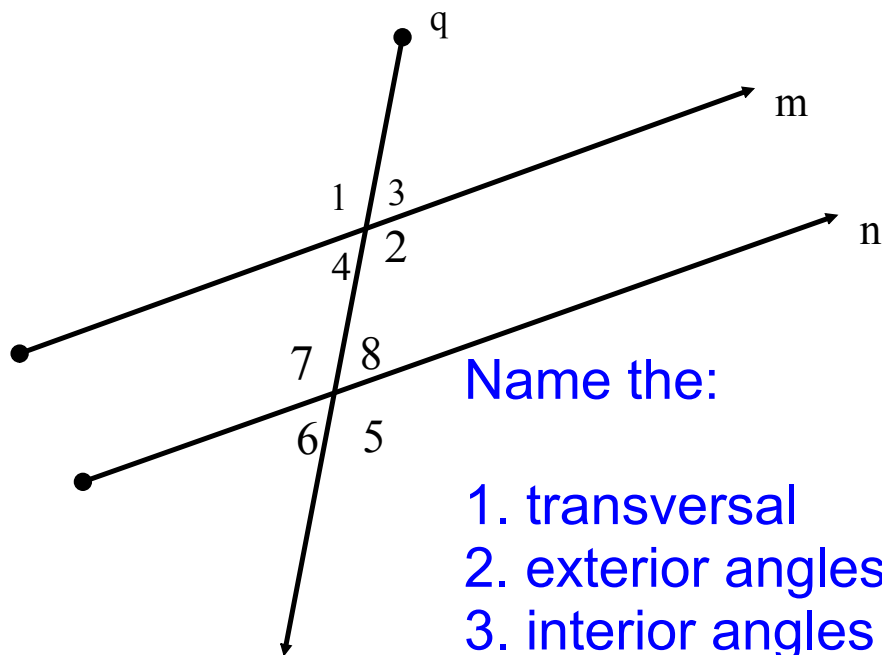
1. $\angle 1$ and $\angle 3$
2. $\angle 2$ and $\angle 3$
3. $\angle 1$, $\angle 2$, $\angle 7$, $\angle 8$
4. $\angle 3$, $\angle 4$, $\angle 5$, $\angle 6$
5. $\angle 3$ and $\angle 5$
6. $\angle 4$ and $\angle 5$
7. $\angle 2$ and $\angle 7$
8. $\angle 2$ and $\angle 6$

Linear pair
Vertical angles
External angles
Internal angles
Same-side interior angles
Alternate interior angles
Alternate exterior angles
Corresponding angles

D) Parallel lines
coplanar lines that never intersect

E) Skew Lines
non-coplanar lines that never intersect

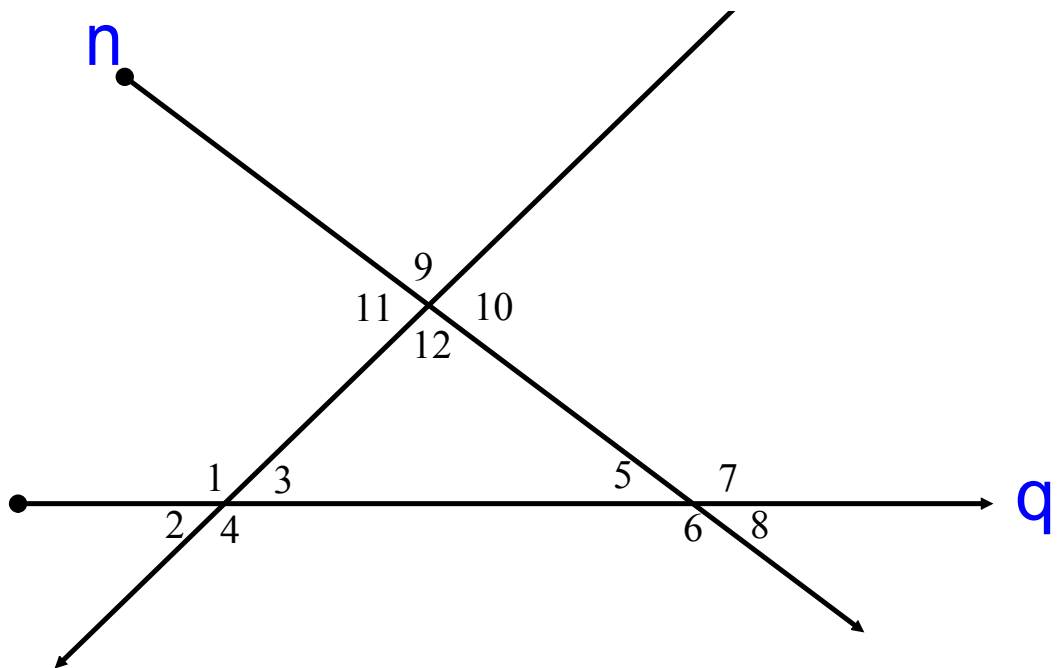




Name the:

1. transversal
2. exterior angles
3. interior angles
4. vertical angles

5. alternate interior
6. alternate exterior
7. consecutive interior
8. corresponding



give names if

q is the transversal-

1&4 1&8 3&6

3&5 3&7

n is the transversal

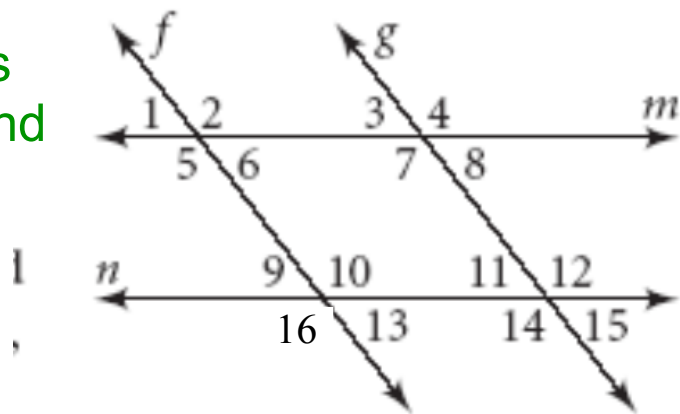
10&5

9&6

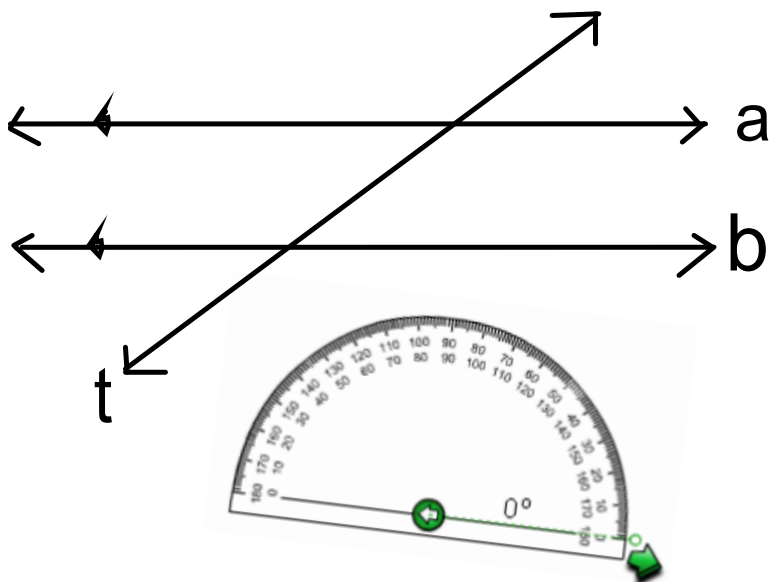
WARM UP

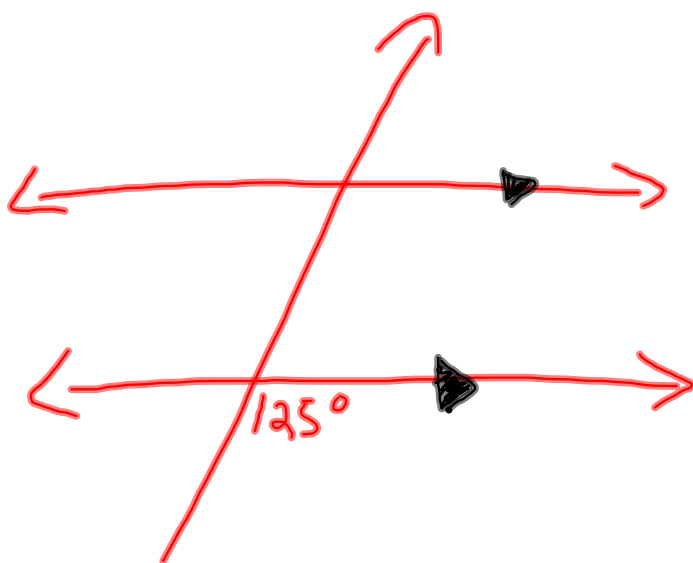
For each pair of angles
state the transversal and
angle pair name.

1. $\angle 2$ and $\angle 10$
2. $\angle 11$ and $\angle 13$
3. $\angle 7$ and $\angle 8$
4. $\angle 9$ and $\angle 5$
5. $\angle 12$ and $\angle 14$
6. $\angle 3$ and $\angle 15$
7. $\angle 1$ and $\angle 6$
8. $\angle 6$ and $\angle 11$
9. $\angle 2$ and $\angle 4$
10. $\angle 1$ and $\angle 16$

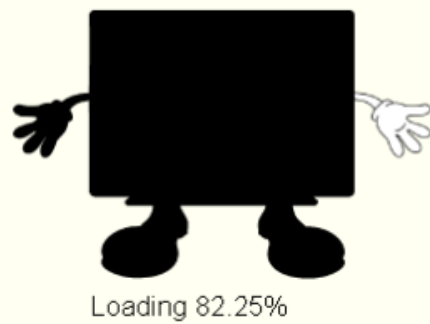


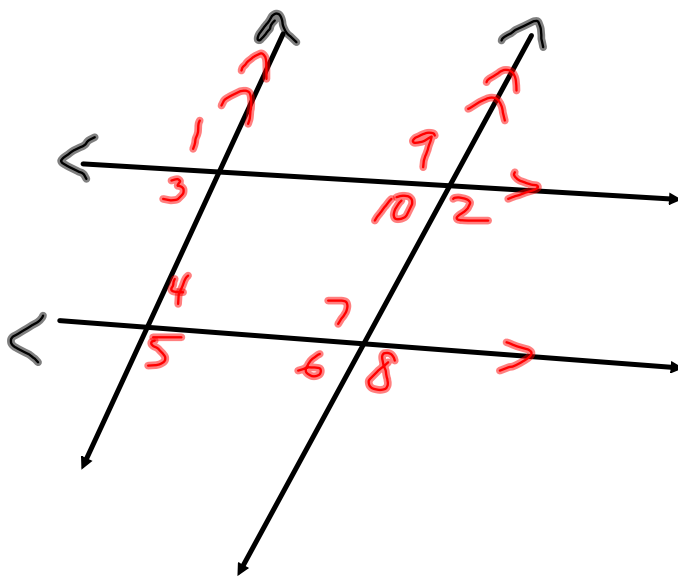
Measure all angles formed by a, b and t





sec 3.2 theorems





1) $m\angle 1 = 40^\circ$
 $m\angle 10 = ?$

2) $m\angle 3 = 30^\circ$
 $m\angle 10 = ?$

3) $m\angle 2 = 100^\circ$
 $m\angle 3 = ?$

4) $m\angle 6 = 70^\circ$
 $m\angle 1 = ?$

In the figure, $l \parallel m$ and $c \parallel d$. Find the values of x , y and z .

